CLAIMS

1.   A software licence management system (1, 60) in which a licence to use a software product (4, 65) is represented by a data token (7, 67), the system comprising:

5   a software controller (6a, 62a) for controlling use of a software product (4, 65) at a user device (3, 64); and

          a licence management server (2, 61) for communicating with the software controller (6a, 62a) via a data communications network (5, 63);

          wherein the software controller (6a, 62a) is adapted for

10   - allowing said use of the software product (4, 65) substantially only during a use period associated with a current data token (7, 67) supplied to the software controller by the licence management server (2, 61),

- enabling user access to an exchange token, dependent on the current data token (7, 67) supplied by the licence management server, whereby the exchange token can be supplied as a

15   current data token to another said software controller (6b, 62b), and

- supplying one of the current data token (7, 67) and the exchange token via the network (5, 63) to the licence management server to be exchanged for a new data token to replace the current data token (a) to extend the licence for the software product (4, 65) beyond the use period associated with a current data token (7, 67) supplied by the licence management server and (b)

20   if the current data token is an exchange token from another said software controller;

          and wherein the licence management server (2, 61) is adapted for

- supplying via the network (5, 63) to the software controller (6a, 62a) a new data token, to replace the current data token (7, 67) and having a new use period associated therewith, in exchange for a current data token, or an exchange token corresponding to the current data

25   token, received from the software controller, and

- detecting if a said token received from the software controller for exchange corresponds to a token already exchanged by the licence management server (2, 61).

2.   A system as claimed in claim 1 wherein the exchange token is a copy of the current data

30   token (7, 67), the licence management server (2, 61) being adapted for detecting if the same data token is received twice for exchange.

3.   A system as claimed in claim 2 wherein the licence management server (2, 61) is
adapted for:

        storing a token identifier corresponding to each data token (7, 67) received by the server
(2, 61) for exchange; and

5   comparing the token identifier for each received data token with the stored token
identifiers to detect if the same data token (7, 67) is received twice for exchange.

4.   A system as claimed in claim 3 wherein the token identifier for a data token (7, 67)
comprises that data token.

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5.   A system as claimed in any preceding claim wherein the system is adapted such that the
use periods associated with alternate data tokens (7, 67) in a chain of data tokens received by
the software controller (6a, 62a) from the licence management server (2, 61) do not overlap.

15 6.   A system as claimed in any preceding claim wherein:

        an exchange period is associated with each data token (7, 67); and

        the system is adapted such that a new data token, to replace a current data token, can be
obtained by the software controller (6a, 62a) only during the exchange period associated with
that current data token.

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7.   A system as claimed in claim 6 wherein the use period and exchange period associated
with a data token (7, 67) overlap.

8.   A system as claimed in any preceding claim wherein the software controller (6a, 62a) is
25 adapted for enabling user access to said exchange token by supplying the exchange token for
storage by the user.

9.   A system as claimed in any one of claims 1 to 7 wherein the software controller (6a,
62a) is adapted for enabling user access to said exchange token by storing the exchange token
30 at a back-up storage location and supplying access data, for accessing the exchange token at
said storage location, to the user.

10.   A system as claimed in any preceding claim wherein the licence management server (2, 61) is adapted for supplying a new data token (7, 67) in exchange for a received token only if the received token does not correspond to a token already exchanged.

11.   A system as claimed in any one of claims 1 to 9 wherein the licence management server (2, 61) is adapted for supplying a new data token (7, 67) in exchange for a received token before detecting if the received token corresponds to a token already exchanged.

12.   A software licence management system (50) in which a licence to use a software product (55) is represented by a data token (56), the system comprising:

        a software controller (52a) for controlling use of a software product (55) at a user device (53); and

        a licence management server (51) for communicating with the software controller (52a) via a data communications network (54);

        wherein the software controller (52a) is adapted for

- allowing said use of the software product (55) substantially only during a use period associated with a current data token (56) supplied to the software controller by the licence management server (51),

- receiving an exchange token (57) associated with said licence, and

- supplying one of the current data token (56) and the exchange token (57) via the network (54) to the licence management server (51) to be exchanged for a new data token (a) to extend the licence for the software product beyond the use period associated with a current data token (56) supplied by the licence management server and (b) if a said exchange token (57) is received by the software controller in the absence of a current data token (56);

        and wherein the licence management server (51) is adapted for

- storing the use period for each data token (56) supplied to the software controller (52a) under the licence, and

- supplying via the network (54) to the software controller (52a) a new data token in exchange for a current data token (56), or said exchange token (57), received from the software controller, the new data token having a new use period which does not overlap the use period of a data token previously-supplied under the licence.

13.   A system as claimed in any preceding claim wherein a said data token (7, 56, 67) comprises a coin.

14.   A system as claimed in any preceding claim wherein the use period associated with a

5   data token (7, 56, 67) is indicated in the data token.

15.   A system as claimed in any preceding claim wherein the software controller (6a, 52a, 62a) is adapted for supplying one of the current data token (7, 56, 67) and the exchange token automatically to the licence management server (2, 51, 61) to extend the licence for the

10   software product (4, 55, 65).

16.   A system as claimed in claim 12 wherein:
        an exchange period is associated with each data token (56); and
        the system is adapted such that a new data token, to replace a current data token (56),

15   can be obtained by the software controller (52a) only during the exchange period associated with that current data token

17.   A system as claimed in claim 6 or claim 16 wherein the exchange period associated with a data token (7, 56, 67) is indicated in the data token.

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18.   A system as claimed in any preceding claim wherein:
        a said data token (67) represents a licence to use a plurality of software products (65); and
        the software controller (62a) is adapted for storing product data, indicative of said

25   plurality of software products, at a back-up storage location (58), and allowing use of each of the software products (65) substantially only during the use period associated with the current data token (67) supplied by the licence management server (61).

19.   A system as claimed in claim 18 wherein the product data comprises, for each software

30   product, data representing an individual licence (L_{SP}) for that software product.

20.   A system as claimed in claim 18 or claim 19 wherein the product data comprises the software products (65).

21.   A software controller (6a, 62a) for use in a software licence management system (1, 60)

in which a licence to use a software product (4, 65) is represented by a data token (7, 67), the

system (1, 60) having a licence management server (2, 61) for communicating with the

5   software controller (6a, 62a) via a data communications network (5, 63), wherein the software

controller (6a, 62a) comprises control logic for controlling use of a software product (4, 65) at

a user device (3, 64), the control logic being adapted for:

       allowing said use of the software product (4, 65) substantially only during a use period

associated with a current data token (7, 67) supplied to the software controller (6a, 62a) by the

10   licence management server (2, 61);

       enabling user access to an exchange token, dependent on the current data token (7, 67)

supplied by the licence management server (2, 61), whereby the exchange token can be

supplied as a current data token to another said software controller (6b, 62b); and

       supplying one of the current data token (7, 67) and the exchange token via the network

15   (5, 63) to the licence management server (2, 61) to be exchanged for a new data token to

replace the current data token (a) to extend the licence for the software product beyond the use

period associated with a current data token (7, 67) supplied by the licence management server

and (b) if the current data token is an exchange token from another said software controller.

20   22.   A licence management server (2, 61) for use with a software controller (6a, 62a) as

claimed in claim 21 in a software licence management system (1, 60) in which a licence to use

a software product (4, 65) is represented by a data token (7, 67), the licence management server

(2, 61) comprising control logic adapted for:

       communicating with the software controller (6a, 62a) via a data communications

25   network (5, 63);

       supplying via the network to the software controller (6a, 62a) a new data token, to

replace the current data token (7, 67) and having a new use period associated therewith, in

exchange for a current data token, or an exchange token corresponding to the current data

token, received from the software controller (6a, 62a); and

30   detecting if a said token received from the software controller for exchange corresponds

to a token already exchanged by the licence management server (2, 61).

23.   A software controller (52a) for use in a software licence management system (50) in which a licence to use a software product (55) is represented by a data token (56), the system (50) having a licence management server (51) for communicating with the software controller (52a) via a data communications network (54), wherein the software controller (52a) comprises

5   control logic for controlling use of a software product (55) at a user device (53), the control logic being adapted for:

allowing said use of the software product (55) substantially only during a use period associated with a current data token (56) supplied to the software controller (52a) by the licence management server (51);

10   receiving an exchange token (57) associated with said licence; and

supplying one of the current data token (56) and the exchange token (57) via the network (54) to the licence management server (51) to be exchanged for a new data token (a) to extend the licence for the software product (55) beyond the use period associated with a current data token (56) supplied by the licence management server and (b) if a said exchange

15   token (57) is received by the software controller (52a) in the absence of a current data token (56).

24.   A licence management server (51) for use with a software controller (52a) as claimed in claim 23 in a software licence management system (50) in which a licence to use a software

20   product (55) is represented by a data token (56), the licence management server (51) comprising control logic adapted for:

communicating with the software controller (52a) via a data communications network (54);

storing the use period for each data token (56) supplied to the software controller (52a)

25   under the licence; and

supplying via the network (54) to the software controller (52a) a new data token in exchange for a current data token (56), or said exchange token (57), received from the software controller, the new data token having a new use period which does not overlap the use period of a data token previously-supplied under the licence.

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25.   A computer program for controlling use of a software product (4, 65) at a user device (3, 64) in accordance with a licence represented by a data token (7, 67), the user device (3, 64)

being connectable to a licence management server (2, 61) via a data communications network (5, 63), the computer program comprising program code means adapted to:

allow use of the software product (4, 65) at the user device (3, 64) substantially only during a use period associated with a current data token (7, 67) supplied to the user device by

5 the licence management server (2, 61);

.enable user access to an exchange token, dependent on the current data token (7, 67) supplied by the licence management server (2, 61), whereby the exchange token can be supplied as a current data token to another user device; and

supply one of the current data token (7, 67) and the exchange token via the network (5,

10 63) to the licence management server (2, 61) to be exchanged for a new data token to replace the current data token **(a)** to extend the licence for the software product beyond the use period associated with a current data token (7, 67) supplied by the licence management server and **(b)** if the current data token is an exchange token from another user device.

15 26.   A computer program for use in a licence management server (2, 61) of a software licence management system (1, 60) in which a licence to use a software product (4, 65) is represented by a data token (7, 67), the system (1, 60) including a software controller (6a, 62a) as claimed in claim 21 and the licence management server (2, 61) being adapted for communicating with the software controller (6a, 62a) via a data communications network (5,

20 63), wherein the computer program comprises program code means adapted to cause the licence management server (2, 61) to:

supply via the network (5, 63) to the software controller (6a, 62a) a new data token, to replace the current data token (7, 67) and having a new use period associated therewith, in exchange for a current data token, or an exchange token corresponding to the current data

25 token, received by the licence management server (2, 61) from the software controller; and

detect if a said token received from the software controller for exchange corresponds to a token already exchanged by the licence management server (2, 61).

27.   A computer program for controlling use of a software product (55) at a user device (53)

30 in accordance with a licence represented by a data token (56), the user device (53) being connectable to a licence management server (51) via a data communications network (54), the computer program comprising program code means adapted to:

allow use of the software product (55) at the user device (53) substantially only during a use period associated with a current data token (56) supplied to the user device by the licence management server (51);

receive an exchange token (57) associated with said licence; and

5   supply one of the current data token (56) and the exchange token (57) via the network (54) to the licence management server (51) to be exchanged for a new data token (a) to extend the licence for the software product beyond the use period associated with a current data token (56) supplied by the licence management server and (b) if a said exchange token (57) is received by the user device (53) in the absence of a current data token (56).   .

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28.   A computer program for use in a licence management server (51) of a software licence management system (50) in which a licence to use a software product (55) is represented by a data token (56), the system (50) including a software controller (52a) as claimed in claim 23 and the licence management server (51) being adapted for communicating with the software

15 controller (52a) via a data communications network (54), wherein the computer program comprises program code means adapted to cause the licence management server (51) to:

store the use period for each data token (56) supplied to the software controller (52a) under the licence; and

supply via the network (54) to the software controller (52a) a new data token in

20 exchange for a current data token (56), or said exchange token (57), received by the licence management server (51) from the software controller, the new data token having a new use period which does not overlap the use period of a data token previously-supplied under the licence.

25 29.   A method for controlling use of a software product (4, 65) at a user device (3, 64) in accordance with a licence represented by a data token (7, 67), the user device (3, 64) being connectable to a licence management server (2, 61) via a data communications network (5, 63), wherein the method comprises, at the user device (3, 64):

allowing use of the software product (4, 65) substantially only during a use period

30 associated with a current data token (7, 67) supplied to the user device by the licence management server (2, 61);

enabling user access to an exchange token, dependent on the current data token (7, 67)

supplied by the licence management server (2, 61), whereby the exchange token can be

supplied as a current data token to another user device; and

supplying one of the current data token (7, 67) and the exchange token via the network

5   (5, 63) to the licence management server (2, 61) to be exchanged for a new data token to

replace the current data token (a) to extend the licence for the software product beyond the use

period associated with a current data token (7, 67) supplied by the licence management server

and (b) if the current data token is an exchange token from another user device.

10   30.   A method for operation of a licence management server (2, 61) of a software licence

management system (1, 60), in which system use of a software product (4, 65) at a user device

(3, 64) is controlled by a method as claimed in claim 29, the method for operation of the

licence management server (2, 61) comprising:

supplying via the network (5, 63) to the user device (3, 64) a new data token, to replace

15   the current data token (7, 67) and having a new use period associated therewith, in exchange

for a current data token, or an exchange token corresponding to the current data token, received

from the user device (3, 64); and

detecting if a said token received from the user device (3, 64) for exchange corresponds

to a token already exchanged by the licence management server (2, 61).

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31.   A method for controlling use of a software product (55) at a user device (53) in

accordance with a licence represented by a data token (56), the user device (53) being

connectable to a licence management server (51) via a data communications network (54),

wherein the method comprises, at the user device (53):

25   allowing use of the software product (55) substantially only during a use period

associated with a current data token (56) supplied to the user device by the licence management

server (51); and

supplying one of the current data token (56) and an exchange token (57), associated

with said licence, via the network (54) to the licence management server (51) to be exchanged

30   for a new data token (a) to extend the licence for the software product beyond the use period

associated with a current data token (56) supplied by the licence management server (51) and

(b) if a said exchange token (57) is received by the user device (53) in the absence of a current

data token (56).

32.   A method for operation of a licence management server (51) of a software licence

management system (50), in which system use of a software product (55) at a user device (53)

is controlled by a method as claimed in claim 31, the method for operation of the licence

5   management server (51) comprising:

        storing the use period for each data token (56) supplied to the user device (53) under the

licence; and

        supplying via the network (54) to the user device (53) a new data token in exchange for

a current data token (56), or said exchange token (57), received from the user device (53), the

10   new data token having a new use period which does not overlap the use period of a data token

previously-supplied under the licence.

33.   A computer program product stored on a computer usable medium, comprising

computer readable program means for causing a computer to perform the computer program

15   according to any one of the claims 25 to 28.